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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,580	11/26/2003	Mitchell Clark Voges	67175523.001102	5675
23562 BAKER & MC	7590 08/15/200° CKENZIE LLP	7	EXAMINER	
PATENT DEPARTMENT 2001 ROSS AVENUE			BLAU, STEPHEN LUTHER	
SUITE 2300	ENUE		ART UNIT	PAPER NUMBER
DALLAS, TX	75201		3711	
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			08/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

				Q			
Office Action Summary		Application No.	Applicant(s)				
		10/722,580	VOGES ET AL.				
		Examiner	Art Unit				
		Stephen L. Blau	3711				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
WHI - Exte after - If NO - Failt Any	CHEVER IS LONGER, FROM THE MAILING DATES IN THE MAILING THE MAILING DATES IN THE MAILING THE MAI	ATE OF THIS COMMUN 36(a). In no event, however, may will apply and will expire SIX (6) Mi, cause the application to become	NICATION. a reply be timely filed ONTHS from the mailing date of this communicati ABANDONED (35 U.S.C. § 133).	·			
Status							
1)⊠	Responsive to communication(s) filed on 05 Ju	<u>ıly 2007</u> .					
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
4)⊠ Claim(s) <u>1-77</u> is/are pending in the application.							
	4a) Of the above claim(s) <u>40-66</u> is/are withdrawn from consideration.						
5)[Claim(s) is/are allowed.						
6)⊠	6) Claim(s) <u>1-39 and 67-77</u> is/are rejected.						
·	Claim(s) is/are objected to.		·				
8)[Claim(s) are subject to restriction and/or	r election requirement.					
Applicat	ion Papers						
9)⊠	The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>26 November 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)		·				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date 3) Information Disclosure Statement(s) (PTO/SB/08) Notice of Informal Patent Application							
Paper No(s)/Mail Date 6/21/06,8/23/06,7/18/05. 6) Other:							

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the configurable weights for a head in claim 73 and the quick disconnect in claims 67-77 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

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- 2. The specification is objected to under rule 1.71 of 37 C.F.R. for not being written in an exact and precise way as to enable one skilled in the art to use the same.

 Specifically:
- a. The specification does not disclose how one skilled in the art is to evaluate and correct the swing technique of a golfer [026]. There are a lot of different ways golfers are trained in how to hit a ball. What method should be evaluated against and corrected for?
- b. The specification does not disclose how one skilled in the art is to specify golf equipment for optimizing equipment used for ability [028], loft [031], load time [045], load pattern [039] to [043], shaft length, shaft materials, shaft torque, shaft weight, different grips, different grip weights [060], tip size [069], head center of gravity, ball, and head type [056].

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-39 and 67-77 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With respect to claims 1-29 it is uncertain how to determine if the swing technique is be modified. The specification does not disclose how one skilled in the art is to evaluate and correct the swing technique of a golfer. There are a lot of different ways golfers are trained in how to hit a ball. What method should be evaluated against and corrected for? With respect to claims 1-39 and 73-75 it is uncertain how to specify golf equipment based on ability, loft, load time, load pattern, shaft length, shaft materials, shaft torque, shaft weight, different grips, different grip weights, tip size, head center of gravity, ball, and head type. Nothing in the specification directs one skilled in the art in how to provide golf equipment based on this swing data and launch data. With respect to claims 67-77 it is uncertain how to select a head based on head parameters. The only parameter that the Examiner could see in the specification which is enabled to be evaluated and changed is the lie [063]. It is uncertain how to select a head based on a plurality of parameters since none of the other parameters and how to change them are discussed. The same is true with the shaft. The only parameter that the Examiner could see in the specification which is enabled to be evaluated and changed is the stiffness [069]. It is uncertain how to select a shaft based on a plurality of parameters since none of the other parameters and how to change them are discussed. With respect to claims 71-72 it is uncertain how determine the most longest

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and accurate flight based on spin, velocity and launch angle. How are these manipulated in order to determine the best combination?

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- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitation "using collected ability information provide swing instruction to the golfer". There is insufficient antecedent basis for this limitation in the specification. The specification does not mention a golfer's ability and how to provide swing instruction based on this.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1, 5, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Cervantes (5,779,556).

Anderson discloses determining swing information related to a golfer's swing technique in the form of sensors used during the swing [0042], receiving swing data over a wireless communication link in the form of digital camera collecting data [0026] [0030], combining information and data [0042], using received data and determined information to derive swing parameters for use in fitting a golfer with equipment [0002], optimizing launch angle in the form of this being a method of fitting a club to a golfer and launch angle is measured (Implied) [0042], displaying swing data in a graphical format [0032], generating a baseline performance matrix [0031], [0034], selecting an optimal shaft for a golfer [0050], and selecting an optimal head for a golfer in the form of loft and lie [0051].

Anderson lacks a step of determining if a golfer's swing technique should be modified, provide swing instruction to a golfer if a golfer's swing technique should be modified, when swing technique should not be modified collect data on how a golfer launches a ball with the new swing technique, and using captured images of a swing to provide instruction to the golfer.

Gobush (6,758,759) discloses swing instruction to correct swing flaws during a method of fitting of a club to a golfer (Col. 18, Lns. 55-57). Cervantes discloses a method of evaluating a specific golfer's swing performance and adjusting to correct swing flaws (Col. 1, Lns. 27-34). Clearly an artisan skilled in the art in fitting a club to a golfer using cameras and sensors is going to provide feedback to a golfer's swing to optimize the time of the fitting session by providing an input at suitable time in which prior to the evaluating the golfer's current clubs or receiving swing data are included.

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more than once.

Also clearly is an instructor going to instruct within the observed ability of a golfer. In view of the patents of Gobush and Cervantes it would have been obvious to modify the method of fitting a golfer with equipment of Anderson with a step of determining if a golfer's swing technique should be modified, provide swing instruction to a golfer if a golfer's swing technique should be modified, collecting information related to a golfer's ability and using the information to provide swing instruction to a golfer, when swing technique should not be modified collect data on how a golfer launches a ball with the new swing technique and continue the club fitting procedure in order to have meaningful swing data when a golfer is swinging a club during a fitting process. Some beginner golfers are not going to have a swing worth testing without a minimal amount of swing instruction prior to the testing and evaluation steps to fit a beginner golfer with a set of clubs. It would have been obvious to capture images of a golfer's swing in the camera and use the images to provide instruction in order to save the images to teach with it

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9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Cervantes (5,779,556) as applied to claims 1, 5, and 28-29 above, and further in view of Sayers (4,059,270).

Anderson lacks collecting information related to a golfer's ability and using the information to provide swing instruction to a golfer.

Sayers discloses custom fitting clubs to golfer by fitting a player with a personal timing, coordination and physical strength to his equipment in order to optimize a

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player's game (Col. 1, 18-26). In view of the patent of Sayers it would have been obvious to modify the method of fitting a golfer with equipment of Anderson with the steps of determining collecting information related to a golfer's ability and using the information to provide swing instruction to a golfer in order to optimize a player's game.

10. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759), Cervantes (5,779,556) and Sayers (4,059,270) as applied to claim 2 above, and further in view of Nauck (5,616,832) and Naruo (5,821,417).

Anderson lacks collecting data on a golfer's current golf equipment and current golf equipment data comprises shaft flex, lie angle and loft.

Nauck discloses custom fitting clubs to golfer through evaluating the result of combined equipment and golfer's characteristics in a dynamic evaluation (Col. 4, Lns. 51-55) in order to prevent equipment from having little positive effect for a golfer (Col. 4, Lns. 30-51). Naruo discloses a method of fitting a shaft flex to a golfer using cameras and strain gages (Abstract). In view of the patent of Nauck and Naruo it would have been obvious to modify the method of fitting a golfer with equipment of Anderson with the step of collecting data on a golfer's current golf equipment and current golf equipment data comprises shaft flex, lie angle and loft in order to ensure the current equipment will have a positive effect for a golfer and in order to have a base line to start from in fitting a club to a golfer for shaft flex, lie angle and loft. In view of the patent of Naruo it would have been obvious to modify the method of fitting a shaft flex to a player

in order to maximize the velocity of the head at impact by having the right shaft flex for a player.

11. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Cervantes (5,779,556) as applied to claims 1, 5, and 28-29 above, and further in view of Naruo (5,821,417).

Anderson discloses receiving swing data in the form of stain gauges [0042], and determining swing information related to a golfer's swing technique comprising a video taping of the swing [0026], [0032].

Anderson lacks determining a load time, a load pattern, and a ramp potential and deriving a shaft flex based on a load time, a load pattern, and a ramp potential.

Naruo discloses strain data displayed showing a load time, a load pattern, a ramp potential and peak deflection (Fig. 25), using strain gauges on a shaft in order to detect deflection during a swing (Col. 3, Lns. 7-11), swing information being related to a golfer's swing technique (swing time), a video taping a golfer's swing (Col. 2, Lns. 28-41), and based on the swing parameters select an optimum flex for a shaft based on the deflection (Col. 2, Lns. 28-41, Col. 3, Lns. 4-6). In view of the patent of Naruo it would have been obvious to modify the method of fitting a club to a player of Anderson to include determining data from a strain gage of load time, a load pattern, a ramp potential and peak deflection in order to provide an optimum flex for a shaft to a golfer based on deflection of a shaft.

12. Claims 10-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Cervantes (5,779,556) as applied to claims 1, 5, and 28-29 above, and further in view of Examiner's Official Notice.

The Examiner takes Official Notice that it is well known in the art to fit a club to a player selecting a shaft length, shaft weight, shaft material, tip size, shaft torque, different grips, grip weights, head center of gravity, size, ball spin and than testing the new component by launching a ball to see if further equipment modification is required. In view of the Examiner's Official Notice it would be obvious to modify the method of fitting a club to a player of Anderson to have a set of selecting a shaft length, shaft weight, shaft material, tip size, shaft torque, different grips, grip weights, head center of gravity, ball spin and than testing the new component by launching a ball to see if further equipment modification is required in order to insure each of these parameters are optimized for a specific golfer.

13. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Pelz (5,039,098).

Anderson discloses determining swing information related to a golfer's swing technique in the form of sensors used during the swing [0042], receiving swing data over a wireless communication link in the form of digital camera collecting data [0026] [0030], combining information and data [0042], using received data and determined information to derive swing parameters for use in fitting a golfer with equipment [0002],

optimizing launch angle in the form of this being a method of fitting a club to a golfer and launch angle is measured (Implied) [0042], displaying swing data in a graphical format [0032], generating a baseline performance matrix [0031], [0034], selecting an optimal shaft for a golfer [0050], and selecting an optimal head for a golfer in the form of loft and lie [0051].

Anderson lacks configuring a golf club in real time based on the launch data, collecting data related to how a golfer's swing launches a ball with the configured club and specify equipment based on the collected launch data of the configured club.

Pelz discloses a method of fitting where a quick disconnect coupling is between a shaft and a head so a golfer can test many different shafts with different shaft characteristics with many different heads with different head characteristics in order to minimize the large number of clubs which would be needed for all possibilities if only permanent connections existed (Col. 1, Lns. 10-35). In view of the patent of Pelz it would have been obvious to modify the method of fitting golf equipment of Anderson to have configuring a golf club in real time based on the launch data, collecting data related to how a golfer's swing launches a ball with the configured club and specify equipment based on the collected launch data of the configured club in order to minimize the large number of clubs required during the testing process by have a quick-connect between a shaft and a head.

14. Claims 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Pelz (5,039,098) as applied to claim 30 above, and further in view of Examiner's Official Notice.

See paragraph above for elements of structure previously rejected by Anderson in view of Examiner's Official Notice.

15. Claim 67-69 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Pelz (5,039,098).

Anderson discloses a launch monitor in the form of a camera and a display [0026] [0034].

Anderson lacks a method of fitting a golfer with a club comprising a plurality of heads each comprising a portion of a quick disconnect, providing a plurality of shafts, each shaft comprising a mating portion of a quick disconnect system, selecting a head from a plurality of heads, and selecting a shaft from a plurality of shafts and repeating the process until optimal launch of a ball is achieved.

Pelz discloses a method of fitting a golfer with a club comprising a plurality of heads each comprising a portion of a quick disconnect, providing a plurality of shafts, each shaft comprising a mating portion of a quick disconnect system, selecting a head from a plurality of heads, selecting a shaft from a plurality of shafts, and testing the club in order to minimize the number of clubs needed to test fit clubs (Col. 1, Lns. 10-35). Pelz does not disclose repeating the process after the first head and shaft are selected until optimal launch of a ball is achieved but clearly one skilled in the art in fitting clubs

to a golfer would have selected a suitable number of test clubs in which forming at least two test clubs and until optimal launch of a ball is achieved are included.

In view of the patent of Pelz it would have been obvious to modify the method of fitting a club to a player of Anderson to have a method comprising a plurality of heads each comprising a portion of a quick disconnect, providing a plurality of shafts, each shaft comprising a mating portion of a quick disconnect system, selecting a head from a plurality of heads, selecting a shaft from a plurality of shafts, and testing the club in order to minimize the number of clubs needed to test fit clubs.

In view of the patent of Pelz it would have been obvious to modify the method of fitting a club to a player of Anderson to have a step of repeating the process of testing a configured club at least twice until optimal launch of a ball is achieved in order to ensure the golfer is getting the best equipment.

16. Claims 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Pelz (5,039,098) as applied to claims 67-69 and 78 above, and further in view of Gobush (6,758,759).

Anderson lacks a method of monitoring and optimizing launch based on a combination of spin, velocity, and launch angle to produce the longest and most accurate flight.

Gobush discloses a method of fitting clubs (Col. 2, Lns. 29-32) using cameras (Col. 1, Lns. 60-67) where one of the elements of golf performance is carry distance and directional accuracy, and being able to predict landing points based on ball velocity,

flight direction and ball spin (Col. 1, Lns. 13-23). As artisan skilled in the art of matching a driver to a player would have selected a suitable performance to achieve for carry distance in which maximizing carry distance is included.

In view of Gobush it would have been obvious to modify the method of fitting equipment of Anderson to have a method of monitoring and optimizing launch based on a combination of spin, velocity, and launch angle to produce the longest and most accurate flight in order to minimize the number of strokes for a golfer when playing a hole.

17. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Pelz (5,039,098) as applied to claims 67-69 and 78 above, and further in view of Holls (3,556,533).

Anderson lacks each of the plurality of heads comprise configurable weights to change the center of gravity and when forming a new club comprises configuring the head configurable weights.

Holls discloses a head comprising configurable weights to change the center of gravity (Abstract). In view of Holls it would have been obvious to modify the plurality of heads of Anderson such that each of the plurality of heads comprise configurable weights to change the center of gravity and when forming a new club comprises configuring the head configurable weights in order to make minor weight changes without having to replace the entire head.

18. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Pelz (5,039,098) as applied to claims 67-69 and 78 above, and further in view of Examiner's Official Notice.

See paragraph above for elements of structure previously rejected by Anderson in view of Examiner's Official Notice.

19. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Pelz (5,039,098) as applied to claims 67-69 and 78 above, and further in view of Naruo (5,821,417) and Examiner's Official Notice.

See paragraph above for elements of structure previously rejected by Anderson in view of Naruo and Examiner's Official Notice.

20. Claim 67-69 and 76-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Ashcraft (5,513,844).

Anderson discloses a launch monitor in the form of a camera and a display [0026] [0034].

Anderson lacks a method of fitting a golfer with a club comprising a plurality of heads each comprising a portion of a quick disconnect, providing a plurality of shafts, each shaft comprising a mating portion of a quick disconnect system, selecting a head from a plurality of heads, selecting a shaft from a plurality of shafts and repeating the process until optimal launch of a ball is achieved, a hosel attached to shaft, a head

having a bore to receive a hosel and a new club comprises a hosel inserted into the bore, and a hosel having threads to mate with a screw.

Ashcraft discloses a method of fitting a golfer with a club comprising a plurality of heads each comprising a portion of a quick disconnect, providing a plurality of shafts, each shaft comprising a mating portion of a quick disconnect system, selecting a head from a plurality of heads, selecting a shaft from a plurality of shafts, a hosel attached to shaft, a head having a bore to receive a hosel and a new club comprises a hosel inserted into the bore, a hosel having threads to mate with a screw (Fig. 4), testing the club at least twice and until the club is optimized (Abstract) in order to minimize costs (Col. 1, Lns. 19-21). Ashcraft does not disclose what is meant by optimize or testing but clearly an artisan skilled in the art would have selected a suitable test in which an optimal launch is included.

In view of the patent of Ashcraft it would have been obvious to modify the method of fitting a club to a player of Anderson to have a method comprising a plurality of heads each comprising a portion of a quick disconnect, providing a plurality of shafts, each shaft comprising a mating portion of a quick disconnect system, selecting a head from a plurality of heads, selecting a shaft from a plurality of shafts, a hosel attached to shaft, a head having a bore to receive a hosel and a new club comprises a hosel inserted into the bore, a hosel having threads to mate with a screw and testing the club in order to minimize the costs of the fitting process.

In view of the patent of Ashcraft it would have been obvious to modify the method of fitting a club to a player of Anderson to have a step fitting a club based on optimal

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launch of a ball in order to ensure the golfer is getting the best equipment for locating a ball when swinging.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen L. Blau whose telephone number is (571) 272-4406. The examiner can normally be reached on Mon - Fri 10:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim can be reached on (571) 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEPHEN BLAU PRIMARY EXAMINER

51b 4/8/07 b